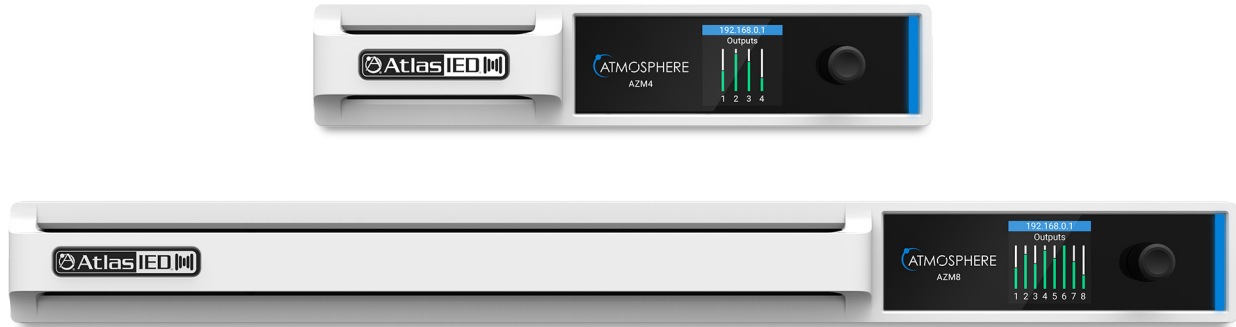


# AZM4 / AZM8

## Atmosphere™ Zone Master Signal Processor



### Features

- 4 (AZM4) & 8 (AZM8) Independently Controlled Zone Models
- Web UI – Works on Any Operating System and Any Web Browser Including: Windows, Mac, Android, iOS, Linux. Optimized for Use on Chrome and Safari.
- Plug and Play Intelligent Wall Plate Accessories
- Daisy Chain up to 8 Accessories per Port, 2 Ports on AZM4, 4 Ports on AZM8
- Adaptive Ambient Noise Compensation
- Accessory Data + Audio Digital Bus – RJ45-Cat 5e/6 Wire Runs up to 1000ft
- Input Auto-Gain Audio Control
- Virtual Wall Controllers for Mobile Devices, with QR Code Set-up, no App Required
- Tilter Filter™ Room EQ Adjustment Tool
- AtlasIED Speaker Presets
- Intuitive Calendar Format Event Scheduler
- Integrated .wav File Message Player with Scheduler and GPIO
- Printable Dynamic System Diagram
- Simple, Streamlined Workflow for All Skill Levels

### Applications

- Restaurant / Bars
- Houses of Worship
- Offices
- Corporate Centers
- Hospitality Suites
- Education

### General Description

The AtlasIED Atmosphere™ Zone Master (AZM) platform was developed to meet the highest standards of design, quality, and value that our customers have come to expect from AtlasIED. We believe you will find this new platform highly flexible to address a variety of applications and refreshingly simple to deploy.

The AZM4 features a 6 input / 4 output configuration with 4 mic / line and 2 RCA stereo summed inputs and 4 output zones. In addition, 2 RJ45 bus ports each allow for 1 audio wall plate accessory, A-XLR, A-RCA, or A-BT, bringing the total input count to 8 by 4 out.

The AZM8 features a 10 input / 8 output configuration with 8 mic / line and 4 RCA stereo summed inputs and 8 output zones. In addition, 4 RJ45 bus ports each allow for 1 audio wall plate accessory, A-XLR, A-RCA, or A-BT, bringing the total input count to 14 by 8 out.

Six Plug and Play smart Wall Plate accessories, unmatched in the industry, expand the AZM capabilities and allow for future scalability. Accessories include 3 x Audio Inputs; balanced Mic / Line XLR, dual RCA stereo summed with 3.5mm, and Bluetooth® audio wall plate inputs, 2 x Controllers; Volume Controls, Volume Controls with Source Select, Scene Recall, and Message Playback, and 1 x Ambient Noise Sensor for Ambient Noise Compensation control. Any control accessory can be daisy chained on a single cable digital bus and assigned to any zone, reducing installation wiring time and complexity.

With a new approach to solving real world customer needs, the AZM line of products sets the new standard for the fixed architecture zone-based processing market.

System		
Type	Signal Processor	
Output Power (Note 1)	AZM4	AZM8
Mic / Line Inputs	4 (Euroblock)	6 (Euroblock)
RCA	2 (mono-summed)	4 (mono-summed)
Line Outputs	4 (Euroblock)	8 (Euroblock)
General Purpose Inputs	6 (Euroblock)	6 (Euroblock)
High Priority Inputs	1 (Euroblock)	1 (Euroblock)
General Purpose Outputs	2 (Euroblock)	2 (Euroblock)
Accessory Ports	2 (RJ45)	4 (RJ45)
Network Port	1 (RJ45)	1 (RJ45)
Power Requirements		
Main Requirements	100 - 240 VAC, 50 - 60 Hz (C14 Mains Inlet Connector)	
Audio Inputs		
Balanced Mic / Line Inputs	Connector Type: 3.5mm Pitch Euroblock Color: Green Sensitivity: +4dBu with Gain Set to 0dB Input Gain: 0 - 60dB in 6dB Steps Phantom Power Voltage: +48VDC 10mA Accepts Unbalanced Inputs: Yes Maximum Input Level: +20dBu (7.72 Vrms) with Gain Set to 0dB Input Impedance: 3.9k $\Omega$ EIN: -125dBu with 150 $\Omega$ Source Impedance and 20kHz BW CMRR: Typically 65dB at 1kHz Maximum Cable Size: 18AWG Minimum Cable Size: 24AWG	
RCA	Right Channel Color: Red Left Channel Color: White Type: Mono-summed Pairs Sensitivity: -10dBV Maximum Input: 2.4 Vrms (7.6dBV / 9.8dBu) for Both Inputs Driven and 4.78 Vrms (13.6dBV / 15.8dBu) for a Single Input	
Audio Outputs		
Balanced Line Outputs	Connector Type: 3.5mm Pitch Euroblock Color: Orange Maximum Output Level: +20dBu (7.75 Vrms) Maximum Cable Size: 18AWG Minimum Cable Size: 24AWG	
Audio Performance		
THD+N	<0.01% at 0dBu Input / Output with 0dB Gain at 1kHz	
Frequency Response	$\pm$ 0.5dB 20Hz - 20kHz	
Dynamic Range (S/N)	>108dB Unweighted 20Hz - 20kHz, > 110dB "A" Weighted	
Crosstalk	>-78dB at 1kHz	
Latency	Euroblock Input or RCA Input to Euroblock Output: 4.9 ms Accessory Input A/C to Euroblock Output: 5.9 ms Accessory Input B/D to Euroblock Output: 6.7 ms	
Maximum Hardware Gain	60dB	
Input Processing		
EQ	24dB/oct HP, PEQ, Low / High Shelf, Notch, LP / HP (BW 6, 12, 24, dB/oct)	
Dynamics	Gate, De-Esser, Compressor, Auto Gain	
Other	Gain, Mixer, Priority Router	
Output Processing		
EQ	PEQ, Tilter Filter, Low / High Shelf, Notch, LP / HP (BW 6, 12, 24, 48dB/oct) Speaker Tuning EQ Presets	
Dynamics	Ambient Noise Compression, Limiter	
Other	Delay (500ms), Gain	

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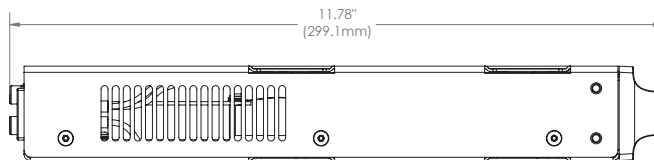
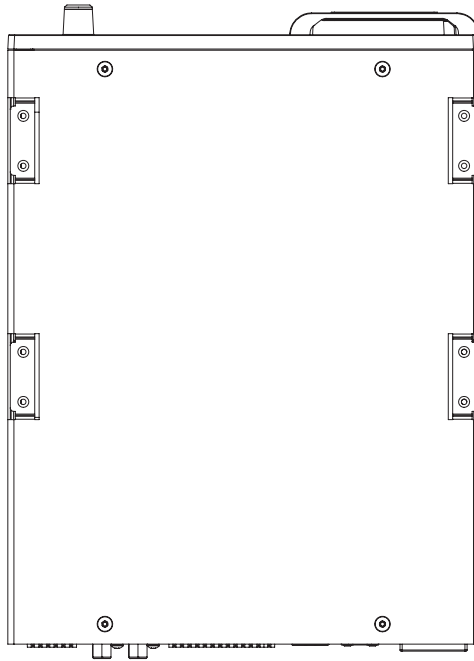
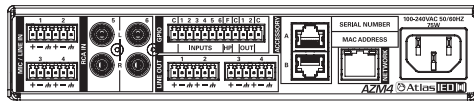
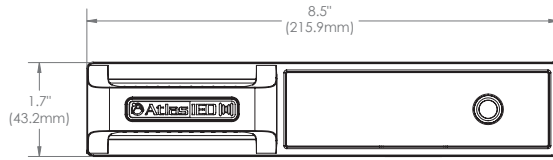
Other Connections		
General Purpose Inputs	Contact Closure: Normally Open Capable of Internal Pull-up to 5VDC via User Interface Voltage Input: 0 - 12VDC (1.3VDC Trigger Voltage)	
High Priority Input	Contact Closure: Normally Open Capable of Internal Pull-up to 5VDC via User Interface Voltage Input: 0 - 12VDC (1.3VDC Trigger Voltage)	
General Purpose Outputs	Source Current: 10mA at 2VDC Maximum Sink Current: 180mA Maximum Sink Voltage: 24VDC	
Accessory Ports	Maximum Accessories per Port: 8 Maximum Accessories per AZM: 16 (10 for AZM4) Maximum Bus Length: 1000ft Maximum Audio Wall Plates per Port: 1	
Ethernet	10/100mB...	
Mechanical		
Airflow	Front to Back	
Operating Ambient Temperature Range	0° - 40°C	
Cooling System	Forced Air with Side and Back Panel Venting	
Energy Consumption		
	<b>AZM4</b>	<b>AZM8</b>
Max	130 BTU / Hr	256 BTU / Hr
No Accessories	75 BTU / Hr	127 BTU / Hr
Front Panel		
Screen	128 x 128 Color TFT Normally White, 1.45"	
Encoder	24 Detent, Push Button	
Light Bar	RGB (Blue = On, Red = Live Fault)	
WiFi		
Type	802.11 b/g/n 2.4GHz	
Free Air Range	60ft	
Dimensions and Weight		
	<b>AZM4</b>	<b>AZM8</b>
Rack Mount Requirements	1 RU, 19"	
Dimensions (with Rack Ears) - Unit	W 19" x H 1.75" x D 11.7" (483mm x 45mm x 297mm)	
Dimensions - Shipping	W 13.5" x H 4.75" x D 14" (343mm x 121mm x 356mm)	W 22" x H 4.75" x D 14" (559mm x 121mm x 356mm)
Weight - Unit	4.735 lbs (2.148kg)	8.330 lbs (3.778kg)
Weight - Shipping	73 lbs (3.3kg)	10.67 lbs (4.8kg)
Agency Approvals		
Safety	Conforms to: ANSI / UL 62368-1 Certified to: CAN / CSA C22.2 #62368-1	
FCC / ISED	Part 15 (Class B) (US), ICES-003 (Canada)	
Optional Accessories		
C-V	Control Type: 24 Detents 360° Continuous Push Button Encoder Light Ring: RGB (Mute, Signal, Locate) Dimensions: 1.78" x 4.2" x 1.9" Minimum Box Depth: 2.25"	
C-ZSV	Control Type: 24 Detents 360° Continuous Push Button Encoder Light Ring: RGB (Mute, Signal, Locate) Screen: 128 x 128 Color TFT Dimensions: 1.78" x 4.2" x 1.9" Minimum Box Depth: 2.25"	

A-RCA	<p>Right Channel Color: Red                  Left Channel Color: White                  Sensitivity: -10dBV (Same as AZM)                  Maximum Input Voltage: +8dBu                  Type: Mono-summed Pair                  Indicator: Green = Signal Presence, Red = Clip, Blue = Locate                  Dimensions: 1.78" x 4.2" x 1.5"                  Minimum Box Depth: 2.25"</p>
A-XLR	<p>Sensitivity: +4dBu (Same as AZM Balanced Inputs)                  Connector Type: XLR (Female)                  Retaining Clip: Yes                  Phantom Power Voltage: +48VDC 10mA                  Accepts Unbalanced Inputs: Yes                  Input Gain: 0 - 60dB                  Maximum Voltage Input: +2-dBu                  Input Impedance: 3.4k<math>\Omega</math>                  EIN: 117dBu at 150<math>\Omega</math>, 20kHz BW                  CMRR: Typically 50dB at 1kHz                  Indicator: Green = Signal Presence, Red = Clip, Blue = Locate                  Dimensions: 1.78" x 4.2" x 2.1"                  Minimum Box Depth: 2.25"</p>
A-BT	<p>BT Standard: V4.2                  Audio Profile: A2DP                  Open Air Range: 100ft                  NFC: Tap-to-Pair                  Indicator: Green = Paired, Red = Error, Blue = Pairing Mode                  Button: Pairs and Unpairs Devices                  Dimensions: 1.78" x 4.2" x 1.4"                  Minimum Box Depth: 2.25"</p>
X-ANS	<p>Data Returned to AZM: Non-audio                  Calibration: RMS, A-weighted, SPL                  Range: 30 - 110dB SPL                  Indicator: Blue = Locate                  Dimensions: 1.78" x 4.2" x 1.4"                  Minimum Box Depth: 2.25"</p>

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## Dimensional Drawings

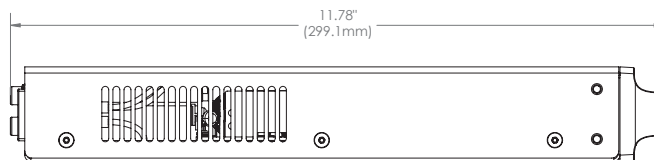
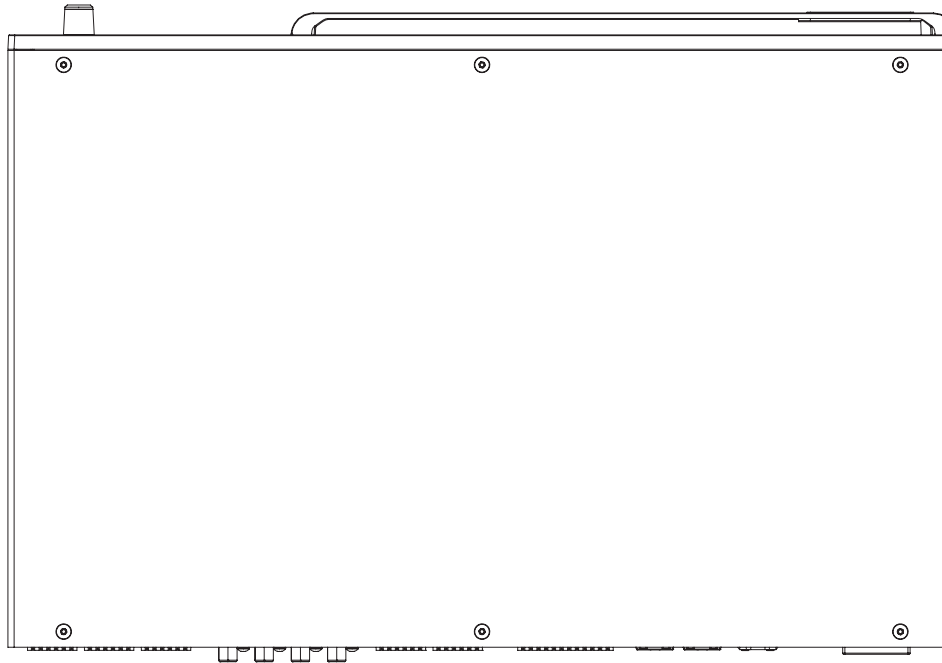
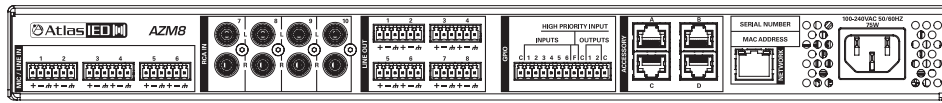
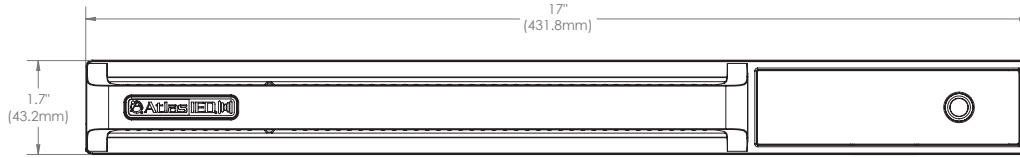
AZM4



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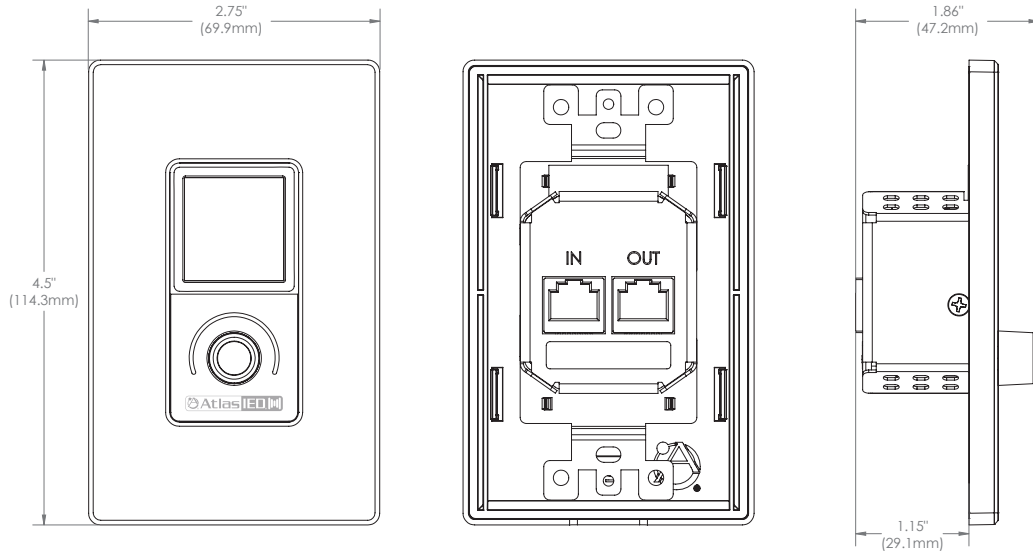
AZM8



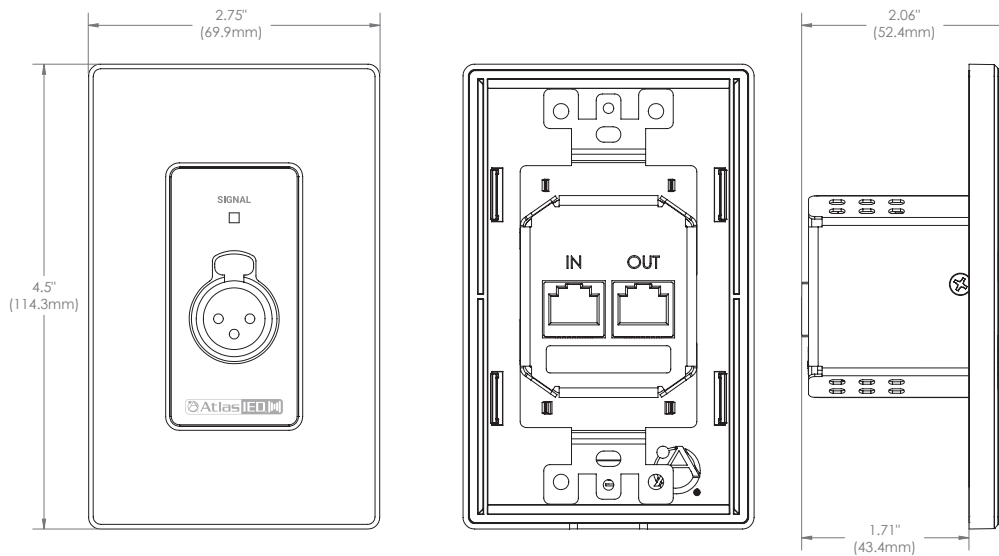
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## Dimensional Drawings

C-V, C-ZSV, A-RCA, A-BT, and X-ANS share the same dimensions



## A-XLR



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